

22335_US_Sequence_Listing_060807.txt
SEQUENCE LISTING

<110> Martin Dugas
Torsten Haferlach
Wolfgang Kern
Alexander Kolhmann
Susanne Schnittger
Claudia Schoch
Roche Molecular Systems

<120> Method for Distinguishing AML-Specific FLT-3 Length Mutations from TKD Mutations

<130> 22335-US

<140> US 10/575,600

<141> 2004-11-04

<150> PCT/EP2004/012470

<151> 2003-11-04

<160> 239

<170> PatentIn version 3.4

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gagtgatgct aagtggaaat gtgaggtgca gctgccacag agggccccca ccangggaaa 180
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gcaaagccac aggcacgggg ctacctgang ccttgggggc ccaatccctg ctccagtgt 420
tccgtgaggc agcacacgaa gtcaaaagag attattctt tcccacagat acctttctc 480
tcccatgacc cttaacagc atctgcttca ttcccctcac cttcccaggc tggatctgagg 540
taaa 544

<210> 27
<211> 121

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<212> DNA

<213> Homo sapiens

<400> 27

ccccagcgcc aaggacatca agaagatctt ggacagcgtg ggtatcgagg cggacgacga 60

ccggctcaac aaggttatca gtgagctgaa tggaaaaaac attgaagacg tcattgccc 120

g 121

<210> 28

<211> 458

<212> DNA

<213> Homo sapiens

<400> 28

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gtgccctgga caccaacagc tcgaagagca cctcctcctt cccctgcccgc gcagggcact 180

tcaacggctt ccgcacggtc atccgcccct tctacctgac caactcctca ggtgtggact 240

agacgcgtgg ccaagggtgg tgagaaccgg agaaccccg gacgcctca ctgcaggctc 300

ccctcctcgg cttccttcct ctctgcaatg accttcaaca accggccacc agatgtcgcc 360

ctactcacct gaggctcagc ttcaagaaat tactggaagg cttccactag ggtccaccag 420

gagttctccc accacctcac cagttccag gtggtaag 458

<210> 29

<211> 553

<212> DNA

<213> Homo sapiens

<400> 29

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atgggtttca tatttcttat caccacagta agttcctact aggcaaaatg agagggcagt 120

gtttcctttt tggtacttat tactgctaag tatttccag cacatgaaac cttatTTTT 180

ccaaagccag aaccagatga gtaaaggagt aagaaccttgc cctgaacatc cttccttccc 240

acccatcgct gtgtgttagt tcccaacatc gaatgtgtac aacttaagtt ggtcctttac 300

actcaggctt tcactatttc ctttaaaatg aggtgatta tttcaaggc ctcagcata 360

tttgtatagt tgcttgctg atataaatgc aatattaatg cctttaagt atgaatctat 420

gccaaagatc acttgttgtt ttactaaaga aagattactt agagggaaata agaaaaatca 480

tgtttgctct cccggttctt ccagtgggtt gagacactgg tttacactt atgccggatg 540

tgctttctc caa 553

<210> 30

<211> 512

22335_US_Sequence_Listing_060807.txt

<212> DNA

<213> Homo sapiens

<400> 30

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cggcaagaag gcccagctca acattggcaa tgtgctccct gtggcacca tgcctgaggg 120
tacaatcgtg tgctgcctgg aggagaagcc tggagaccgt ggcaagctgg cccgggcatc 180
agggaactat gccaccgtta tctcccacaa ccctgagacc aagaagaccc gtgtgaagct 240
gccctccggc tccaagaagg ttatctcctc agccaacaga gctgtggttg gtgtggtggc 300
tggaggtggc cgaattgaca aaccatctt gaaggctggc cggcgttacc acaaataaa 360
ggcaaagagg aactgctgac cacgagtacg ggggtggcc atgaatcctg tggagcatcc 420
ttttggaggt ggcaaccacc agcacatcgg caagccctcc accatccgca gagatgcccc 480
tgctggccgc aaagtgggtc tcattgctgc cc 512

<210> 31

<211> 411

<212> DNA

<213> Homo sapiens

<400> 31

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ccgctcctaa gtgtgtcatt tgtctcagag aacagcgtcg tggctgctgg ccatgactgc 120
tgcccaatgc tctttatcta cgatgaccgc ggctgcctga ctttcgtctc caagtttagat 180
attccaaaac agagcatcca acgcaacatg tctgccatgg aacgcttccg caacatggac 240
aagagagcca caactgagga ccgcaacacg gccttggaga cgctgcacca gaatagcatc 300
actcaagtct ctatttatga ggtggacaag caagattgtc gcaaattttg cactactggc 360
atcgatggag ccatgacaat ttgggatttc aagaccctcg agtcttccat c 411

<210> 32

<211> 469

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (36)..(36)

<223> n = any nucleotide

<400> 32

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ccgtcgtatga tcgcaactgg aagtgtggga gcagccatct gtgggctcca gcaggatgag 120
gaagtgagct cgctcaacttg tcatgccctg actgagctgc tggctaagat caccaacaca 180
gacgtggatt gtctcaaagc ttgccaggag cagattgagg cggtgctcct caatagcctg 240

22335_us_Sequence_Listing_060807.txt

cagcagtacc	gtcaggacca	acgtgacgga	tccaaagtccgg	aggatgaact	ggaccaagcc	300
agcaccccta	cagacgtgcg	ggatatcgac	ctgtgaggat	gccagttggg	ccgaaagaga	360
gagacgcgtc	cataatctgg	tctcttcttc	tttctgggttg	tttttgttct	ttgtgtttta	420
gggtgaaaact	taaaaaaaaaa	attctgcccc	cacctagatc	atatttaaa		469

<210> 33
<211> 426
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(426)
<223> n = any nucleotide

<400> 33	gcaagtcatg	ctgaataactc	ctcccccctt	ctcttttgcc	ccctcccttc	ctgccccccag	60
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	ctaccangac	tcaagagaca	ncccttcctg	ctgacattcc	catcacaaca	ttcctcagac	180
	aaggcctgtaa	actaaaatct	gttaccattc	tgatggcaca	gaaggatctt	aattcccatc	240
	tctatacttc	tcctttggac	atggaaagaa	aagttattgc	tggtgcaaag	atagatggct	300
	gaacatcagg	gtgtggcatt	ttgttccctt	ttccgttttt	ttttttttta	ttgtgttgt	360
	taattttatt	gcaaagtgt	attcagcgta	cttgaatttt	tcttcctctc	cacttcttag	420
	aggcat						426

<210> 34
<211> 484
<212> DNA
<213> Homo sapiens

<400> 34	gccattacag	tatccaatgt	ctttgacag	gtgcctgtcc	ttgaaaaaca	aagtttctat	60
	tttttatttt	aattggttta	gttcttaact	gctggccaac	tcttacatcc	ccagcaaatc	120
	atcgggccat	tggatttttt	ccattatgtt	catcaccctt	atatcatgt	cctcagatct	180
	ctctctctct	cctctctctc	agttatata	tttcttgct	tggacttttt	ttttcttttc	240
	tttttctttt	ttttttgtct	ttaaaaacaag	tgtgatgcc	tatcaagtcc	atgttattct	300
	ctcacagtgt	actctataag	aggtgtgggt	gtctgtttgg	tcaggatgtt	agaaagtgc	360
	gataagtagc	atgatcagt	tatgcaaaaa	ggtttttagg	aagtatggca	aaaatgttgt	420
	attggctatg	atggtgacat	gatatagtca	gctgcctttt	aagaggtctt	atctgttcag	480
	tgtt						484

22335_US_Sequence_Listing_060807.txt

<210> 35
<211> 523
<212> DNA
<213> Homo sapiens

<400> 35
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ccagagaccc tggccagcc atccttcattc gggatggagt ctgctggcat ccatgaaacc 120
acctacaaca gcatcatgaa gtgtgatatt gacatcagga aggacctcta tgctaacaat 180
gtcctatcag gggcaccac tatgtaccct ggcattgccg accgaatgca gaaggagatc 240
acggccctag cacccagcac catgaagatc aagatcattg cccctccgga gcgcaaatac 300
tctgtctgga tcggcggctc catcctggcc tctctgtcca ccttccagca gatgtggatc 360
agcaaacagg aatacgatga agccggcct tccattgtcc accgcaaatg cttctaaaac 420
actttctgc tcctctctgt ctctagcaca caactgtgaa tgtcctgtgg aattatgcct 480
tcagttcttt tccaaatcat tcctagccaa agctctgact cgt 523

<210> 36
<211> 379
<212> DNA
<213> Homo sapiens

<400> 36
tacaaaggcc acctgtcaga gtccctctt gggactgga agacaatgtt gtctgcagcc 60
agcctgctcg aaacttagt cggcctgatg gcttagagga ctctgaggat agcaaagaag 120
atgagaatgt gcctactgtc cctgatcctc caagtcaaca tttacgtggg catgggacag 180
gctttgctt tgattccagc tttgatgttc acaagaagtg tcccctctgt gagttaatgt 240
ttcctcctaa ctatgatcag agcaaattt aagaacatgt tgaaagtcac tggaaagggtgt 300
gcccgtatgtc cagcgagcag ttccctcctg actatgacca gcaggtgttt gaaaggcatg 360
tgcagacccca ttttgcata 379

<210> 37
<211> 138
<212> DNA
<213> Homo sapiens

<400> 37
aaaccacacc taaaatagac cactgaggag accatagagc ggatgcttc atgcaccctt 60
tactgcactt tctgaccagg agctactttg agtttgggt tactaggatc agggtcagtc 120
tttggcttat caataaat 138

<210> 38
<211> 489
<212> DNA

22335_US_Sequence_Listing_060807.txt

<213> Homo sapiens

<400> 38						
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aactttacaa	atccatgaag	ggtgctggca	cagatgagaa	gactctgacc	aggatcatgg	120
tatcccgca	tgagattgac	ctgctcaaca	tccggaggga	attcattgag	aaatatgaca	180
agtctctcca	ccaagccatt	gagggtgaca	cctccggaga	cttcctgaag	gccttgctgg	240
ctctctgtgg	tggtgaggac	tagggccaca	gctttggcgg	gcacttctgc	caagaaatgg	300
ttatcagcac	cagccgccc	ggccaagcct	gattgttcca	gctccagaga	ctaaggaagg	360
ggcaggggtg	gggggagggg	ttggggtggg	ctcttatctt	catggagctt	aggaaacgct	420
cccactcccc	cgggccccatcg	agggccagca	cggctgagcg	gtaaaaacc	gtagccatag	480
atcctgtcc						489

<210> 39

<211> 506

<212> DNA

<213> Homo sapiens

<400> 39						
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gtctgtcctg	ttcgggctgc	tgctcgtcct	ggctgtcttc	tgccattcag	gtcatagcct	120
gcagtgtac	aactgtccta	acccaactgc	tgactgcaaa	acagccgtca	attgttcatc	180
tgattttgat	gcgtgtctca	ttaccaaagc	tgggttacaa	gtgtataaca	agtgttgaa	240
gtttgagcat	tgcaatttca	acgacgtcac	aacccgcttg	aggaaaaatg	agctaacgta	300
ctactgctgc	aagaaggacc	tgtgtactt	taacgaacag	cttggaaaatg	gtgggacatc	360
cttattcagag	aaaacagttc	ttctgctggt	gactccattt	ctggcagcag	cctggagcct	420
tcatccctaa	gtcaacacca	ggagagcttc	tcccaaactc	cccgttcctg	cgtagtccgc	480
tttctcttgc	tgccacattc	taaagg				506

<210> 40

<211> 421

<212> DNA

<213> Homo sapiens

<220>						
<221>	misc_feature					
<222>	(35)..(35)					
<223>	n = any nucleotide					

<400> 40						
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ttgagtgggt	tctctgcagc	cctcagatta	ttttcctct	ggctccttgg	atgttagtcag	120

22335_US_Sequence_Listing_060807.txt

ttagcatcat tagtacatct	ttggagggtg	gggcaggagt	atatgagcat	cctctctcac	180
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catatgtggg	tgtcagtcag	ggacaacaag	atccitaatg	cagagctaga	300
cagggaaagtg	ggaaagtgtt	ccagatagca	ggcatgaaa	acttagagag	360
ctgaaaatcg	agttttcct	ctgtcttaa	attttatatg	ggcttggta	420
g					421
<210>	41				
<211>	484				
<212>	DNA				
<213>	Homo sapiens				
<400>	41				
ggtaggatat	cttggcttg	ccacacacag	ttacagagt	aacactctac	60
tggcagtatt	aagtgtgctt	atttaaatg	ttactggtag	aaaggcagtt	120
tgtatatagt	atgaatgcag	tggggacacc	cttgtggtt	acagttttag	180
gtcatcctta	ataacaacag	atctgcaggg	gtatgtttt	ccatctgcat	240
gctaactcct	agctgactca	gcatacattt	tataaaatac	ctttgttaac	300
cactcacaga	tgttgaggc	tttcagaagc	tcttctaaaa	aatgatacac	360
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cctaatttaca	tttgtat	atgatcttgg	ctgtat	tggcataggc	480
agat					484
<210>	42				
<211>	513				
<212>	DNA				
<213>	Homo sapiens				
<400>	42				
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tgaccttaac	ctgtgtggc	tgacagagga	cccagatctt	caggtttctg	120
ccagacagt	ctggaactga	cagagactgg	ggtggaggcg	gctgcagcct	180
tgtggccgc	accctgctgg	tcttgaagt	gcagcagccc	ttccctttcg	240
ccagcagcac	aagttccctg	tcttcatggg	gcgagttat	gaccccaggc	300
gcaggatcag	gttagggcga	gctgcaccc	tccagcctca	gctctcagtt	360
tgctgcctgc	ctggacttgc	ccctgccacc	tcctgcctca	ggtgtccgct	420
agggctcctg	agggtctggg	caaggacct	gcttctatta	gcccttctcc	480
catgctctcc	aaaccacttt	ttgcagctt	ctc		513

22335_US_Sequence_Listing_060807.txt

<210> 43
<211> 497
<212> DNA
<213> Homo sapiens

<400> 43
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ctctgtacga catggcccg tatgagcggg agcagtatgc cgatcggcg cggtaactcag 120
ccttttaag cttgaggtgg gatgtgtgt ggctgaaatt ccgagctgcg gttgtgcatt 180
agaatacacc ctgcgtggta ccccatctcc gggacgttct cggctctgtg cgttcagttc 240
ctcaggaacc gtggaccta atttacattt ctaagtttag accttctt cctttcctt 300
cctttcctct cctgcccatt ttccctgttct tctgtcccttc aatacttctg tagcttccca 360
ttcatgttct cttctccctt caggcctcat tgtgtgcaga aactgtggtg ggggctgtgc 420
tgtctccctcc ctgcctccctg cctcctgcgg ctgttggatt tggaaatgac ctgggtgaga 480
gtctcaactgc tccaggg 497

<210> 44
<211> 526
<212> DNA
<213> Homo sapiens

<400> 44
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ctccccgtgc tcagccgagg cctgcctgga gccccagatc accccttcct actacaccac 120
ttctgacgct gtcatttcca ctgagaccgt cttcattgtg gagatctccc tgacatgaa 180
gaacagggtc cagaacatgg ctctctatgc tgacgtcggt ggaaaacaat tccctgtcac 240
tcgaggccag gatgtggggc gttatcaggt gtcctggagc ctggaccaca agagcgccca 300
cgcaggcacc tatgaggtta gattttcga cgaggagtcc tacagcctcc tcaggaaggc 360
tcagaggaat aacgaggaca tttccatcat cccgcctctg tttacagtca gcgtggacca 420
tcggggcact tggAACGGGC cctgggtgtc cactgaggtg ctggctgcgg cgatcggcct 480
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<210> 45
<211> 185
<212> DNA
<213> Homo sapiens

<400> 45
ctgatgccat caaagagggtc ttgcacaata aattccacat catggcgca gtgggcattcg 60
gcattgccgt ggtcatgata tttggcatga tcttcagat gatcttgc tttgttatcc 120
gcaggaaccg cgagatggtc tagagtcagc ttacatccct gagcaggaaa gtttacccat 180
gaaga 185

22335_US_Sequence_Listing_060807.txt

<210> 46
<211> 499
<212> DNA
<213> Homo sapiens

<400> 46
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cgtacattga gaatgagaag ctcatctcg gaaagcgcca ggagctggtc accaagatcg 120
accacatcct gatatccctg tagccctgc ccgcattcctc cagggggccc aggggtcctg 180
cacttgctg tggcaggcag attgggtggt agtgggaggt tgtgcatgga ggccagtgaa 240
agctgacatc tgtaaaaggc cttcaaggaa gagaaaaccag gccctgcgtc aggcagtgtg 300
agtttgcgt ttgtccttaa ctttctttt tttttttt aaaaaagaaa actttaaaaa 360
aactcccatt aaaaacaaaa catcttgtg ttgtgaacaa aggaatttcc aatatttgc 420
tggtattctg ttctgaagtc taggatattt ttcaagcctat aaagccccct gttttatgcc 480
cttctaattc tgatgtttg 499

<210> 47
<211> 554
<212> DNA
<213> Homo sapiens

<400> 47
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ctccctgtct ccagctgcct gggcccgaa gggctttggt tccttctctg ggtctgattt 120
tctcaactgaa ctccaccgac caactgcctt aagccccag ggcctccagg gcccagggttc 180
gagacccaaa cccccaat ccaaaacttc tcttgaaaag ttcagggacc gtccagggga 240
gatggggagg agatatggag tgagtcaccc gctccagaag atgccagctt ctctctccag 300
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acacccctgt cccacccaca cagctgcctt agctgacccc gagaagtgtctt cttggctgac 420
ccctctggtg tgtggtgagg ggctttctct tccccttcct gtttcagacc ccccccatttc 480
ccgcacatgg tgtggggggc tgggggaggt ccaagcagag tgttttattt ttatcgctt 540
atgtttttgg ttat 554

<210> 48
<211> 547
<212> DNA
<213> Homo sapiens

<400> 48
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gctgcgagac aacctcaccc tctggacgag cgaccagcag gatgaagaag caggagaagg 120

22335_US_Sequence_Listing_060807.txt

caactgaaga tccttcagat cccctggccc ttccttcacc caccacccccc atcatcaccg 180
attcttcctt gccacaatca ctaaatatct agtgctaaac ctatctgtat tggcagcaca 240
gctactcaga tctgcactcc tgtctcttgg gaagcagttt cagataaatac atgggcattt 300
ctggactgat gtttgctttg agcccacagg agctcccttt ttgaattgtg tggagaagtg 360
tgttctgatg aggcatttta ctatgcctgt tgatctatgg gaaatctagg cgaaagtaat 420
gggaaagatt agaaagaatt agccaaccag gctacagttg atatttaaaa gatccattta 480
aaacaagctg atagtgtttc gttaaggagt acatcttgc catgcaaaaaa tgaattcacc 540
cctccca 547

<210> 49
<211> 525
<212> DNA
<213> Homo sapiens

<400> 49
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ttcagactgg tcagcattag aaaattcttg gctttattgt actgggtatt aagaccttgc 180
tcttcctagt ccttttaatg ctgtgtttc tgttaagttc tttcatttgc ttgttaatttt 240
gttttcagc aaatttatat tgtttgcta ggtgttcatc ctataagaag caggatcgta 300
taggcagaaaa aatgattgta ggaaagttgc aggattagcg gaatgtatgg ttcaacctta 360
attatagctt cattgcagga cttaactgtt tctccatttt ctagaagctg ctgttgctgc 420
tttgcgtatga cgtgagatca ataagaagaa cctagtctag agacaatgtat gctagttgc 480
atatgttttc ctatgcaata gttgtttcc cagttattca aagca 525

<210> 50
<211> 360
<212> DNA
<213> Homo sapiens

<400> 50
agcccaggcg ttggcagcag ggttagaaca gctgcctgag gctcccccctt gaaggacacc 60
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atgtgttttgc tttgttgctg ggcggatgtat gtttactaacat gatgtatttt acatccaaag 180
ggggataggc acttggaccc ccattctcca aggccccgggg gggcggtttc ccatggatgt 240
tgaaaggctg gccattatata agtccctgtatc actcaaattgtt caacccacc gaggcacccc 300
cccgcccccc agaatcttgg ctgtttacaa atcacgtgtc catcgagcac gtctgaaacc 360

<210> 51

22335_US_Sequence_Listing_060807.txt

<211> 568

<212> DNA

<213> Homo sapiens

<400> 51

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agaaaatggga actgacaatg atagtaaaaa ttggaaggaa gtgcataaga tggtggttga 120
aagtgcctat gaagtcatca agctaaaagg atataccaac tggctattg gattaagtgt 180
ggctgatctt attgaatcca tggtaaaaaa tctatccagg attcatcccg tgtcaacaat 240
ggtaaagggg atgtatggca ttgagaatga agtcttcctg agccttccat gtatcctcaa 300
tgcccgggaa ttaaccagcg ttatcaacca gaagctaaag gatgatgagg ttgctcagct 360
caagaaaaat gcagataccc tgtggacat ccagaaggac ctaaaagacc tgtgactagt 420
gagctctagg ctgtagaaat ttaaaaacta caatgtgatt aactcgagcc tttagtttc 480
atccatgtac atggatcaca gtttgctttg atcttcttca atatgtgaat ttgggctcac 540
agaatcaaag cctatgcttg gtagctct 568

<210> 52

<211> 377

<212> DNA

<213> Homo sapiens

<400> 52

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atgctcatgt ggtgttgggg aaagcagaca ttgacccac caagagggcg ggagaactca 180
ctgaggatga ggtggAACGT gtgatcacca ttatgcagaa tccacgcccag tacaagatcc 240
cagactggtt cttgaacaga cagaaggatgg taaaggatgg aaaatacagc caggtcctag 300
ccaatggtct ggacaacaag ctccgtgaag acctggagcg actgaagaag attcggggccc 360
atagaggcgct gcgtcac 377

<210> 53

<211> 322

<212> DNA

<213> Homo sapiens

<400> 53

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gaggaagatt atcaaatggta tcttcatcca atggatgcat aaactttctt acttacttgt 180
agtggcaaag ctggctttca agtacaagtt tggatggctcc attacctatg ctcctattat 240
ccgcttctgt cccgcaacaa agtagctcac ttaggcgtat gaccacatgc attatgatag 300

tttccacca ccatattgaa ta
 <210> 54
 <211> 525
 <212> DNA
 <213> Homo sapiens
 <400> 54
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 cttggagcca atggagactg tctcaagagg gcactggtgg cccgacagcc tggcacaggg 180
 cagtggaca gggcatggcc aggtggccac tccagacccc tggctttca ctgctggctg 240
 ccttagaacc tttcttacat tagcagtttgc tttgtatgc actttgtttt tttctttggg 300
 tcttgaaaaa ttttccact tagaaattgc atttcctgac agaaggactc aggttgtctg 360
 aagtcaactgc acagtgcac tcagccaca tagtcatgtt tccctgttc actctactta 420
 gcatgtccctt accgagtctc ttctccactg gatggaggaa aaccaagccg tggcttcccg 480
 ctcagccctc cctgccccctc cttcaacca ttccccatgg gaaat 525

<210> 55
 <211> 536
 <212> DNA
 <213> Homo sapiens
 <220>
 <221> misc_feature
 <222> (1)..(536)
 <223> n = any nucleotide
 <400> 55
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 gaatctgatg acagcaaatc aaagaagaaa agagatgtc ctgnacaaac caagaggatt 120
 tgccagaggt cttgatcctg naaagaataa tntggtgcac cagacagcag tggagnaaat 180
 tcatgtttctt catgaanatg gnananagat tcagatgagg cagacttggt gntctngcga 240
 aagnaggcaa atatgaagtgc tcctcaaattt ngtattgtctttatgaaatgagactaac 300
 ttngcatttc tntgntccag aagatgaagc tcaataattt ttcacatng ttcntttat 360
 atatattttat atatatatataa aaanaatng ggtcttagan ttttgantttt actangtg 420
 acnaaaataa ctacatccatgatgaaatca agtttgatgatg ttttgatggaaatgatcgt 480
 tggaagagtt gttgggggnt ttttgcattc catagcactg gttactttga acaaataat 536

<210> 56
 <211> 539
 <212> DNA
 <213> Homo sapiens

22335_US_Sequence_Listing_060807.txt

<400> 56
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cttgtttag ctgatccatc tgtaacacag gagggatcct tggctgagga ttgtatttca 180
gaaccaccaa ctgctttga caattgttaa cccgcttaggc tccttggtt agagaagcca 240
cagtccttca gcctccaatt ggtgtcagta ctttaggaaga ccacagctag atggacaaac 300
agcattggga ggccttagcc ctgcttctt caattccatc ctgttagagaa caggagtcag 360
gagccgctgg caggagacag catgtcaccc aggactctgc cggtgcagaa tatgagcaat 420
gccatgttct tgcagaaaac gcttaacctg agtttcata gaggtaatca ccagacaact 480
gcagaatgtt gaacactgag caggacaact gacctgtctc cttcacatag tccatatca 539

<210> 57
<211> 398
<212> DNA
<213> Homo sapiens

<400> 57
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gagtgccttc gagtgcgagg cgaggtggct cctgacgcta agagcttcgt gctgaacctg 120
ggcaaagaca gcaacaacct gtgcctgcac ttcaaccctc gcttcaacgc ccacggcgac 180
gccaacacca tcgtgtgcaa cagcaaggac ggcggggcct gggggaccga gcagcgggag 240
gctgtcttcc cttccagcc tggaaagtgtt gcagaggtgt gcatcacctt cgaccaggcc 300
aacctgaccg tcaagctgcc agatggatac gaattcaatg tccccaaaccg cctcaacctg 360
gaggccatca actacatggc agctgacggt gacttcaa 398

<210> 58
<211> 489
<212> DNA
<213> Homo sapiens

<400> 58
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ccccagcagg gagacgtctc catctgccaa gtggagcaca ccagctggta tagttccgtc 180
accgtggagt ggaaggcaca gtctgattct gcccagagta agacattgac gggagctgg 240
ggcttcgtgc tggggctcat catctgtgga gtgggactct tcatgcacag gaggagcaag 300
aaagttcaac gaggatctgc ataaacaggg ttcctgaccc caccgaaaag actaatgtgc 360
cttagaacaa gcatttgctg tggggatgtt acacctggtt ccaggacaga ccctcagctt 420
cccaagagga tactgctgcc aagaagttgc tctgaagtca gtttctatcg ttctgcttt 480

22335_US_Sequence_Listing_060807.txt

tgattcaaa 489

<210> 59
<211> 461
<212> DNA
<213> Homo sapiens

<400> 59
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ttaaaaaccc tttgaacaaa gtgtgtcat aaccagtcat gagataaaac aacacaatgc 120
atgttgcctt ttaatgtaa atacccttag gtatcattaa tagttcaaa atattgtggt 180
ttagtaaagt tgatacctgg ttataaatat tatgccttta ttttggcta gaagaagaat 240
tatttttagc ctagatctaa ccattttcat actcttaact gattgaaaca gattcaaaga 300
agtatcgagt gctatgcatt gaaacttggtt tttaaatgtt agatggcact atgtatatta 360
atgtaaaaca atgttaattt actcaagttt tcagttgtt ccgcctggta tgtctgtgt 420
agaagccaat ttttgttat ttttacagtt tcaggttatt t 461

<210> 60
<211> 521
<212> DNA
<213> Homo sapiens

<400> 60
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tggagggcg gaccaaggag ctgggctaca cggtaagaa gcacatctgcag gacctgtccg 120
gcaggatctc cagagctcgg cacaacgaac tctgaaggca ctggggagcc cagcccgca 180
ggaaagaggc cagcgtgaag gacctggct cttggccgtg gcatttccgt ggacagcccg 240
ccgtcagggt ggctgggct ggcacgggtg tcgaggcagg aaggattgtt tctgggtact 300
gcagccgctg ccgtcgcgac acagggcttg gtgggttag catttgggtc tgagatcgcc 360
ccagctctga ctgaaggggc ttggcttcca ctcagcatca gcgtggcagt caccacccca 420
gtgaggacct cgatgtccag ctgctgtcag gtctgatagt cctctgctaa aacaacacga 480
tttacataaa aaatcttaca catctgccac cgaaaatacc a 521

<210> 61
<211> 492
<212> DNA
<213> Homo sapiens

<400> 61
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cctaaaaatct acttggtttg aaatcaagtg gttgaaacac tgtttgactt ttatgttgaag 120
catgttggtg attgaaaatt tcattgagga agtttcaat cagtgatc agtttgattc 180

22335_us_Sequence_Listing_060807.txt

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tgttttgtt ttgttttgtt ttcccaatag aattaagaat tctaatgtt 360
aaaaactgta taaattttta tgggacaaag cctagaaaag agaaatgtag tttgaatcat 420
aatctaaatc atcgtatgat aggaaggaaa agtttggtg ccataatttc tccttcact 480
ggtgttggac tt 492

<210> 62
<211> 445
<212> DNA
<213> Homo sapiens

<400> 62
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gcccgaaaat aagaccactg ttttgaacta ccacaaaagt ataaatgaat attttatgc 120
cacaatctt cctgttgccct gtggagtctc tgctgaaatg aatcaggatt cgagctctag 180
gatgagacag aaaatgaaag catgttggttt gccaggacac tgtgggtta tattgtatgt 240
taacaagttt attttggaca ctggactctc attctgttat tctggcttcg cccctttgt 300
tccccctcct tctttgtaa aggcaatgag ctgtcccg aaaggatcct tcagttacat 360
acaatttatt taatgaaatg tcatggctct gttcatattt ttgtcttggtt cttccaattt 420
gtatatacaa ctttcagagc ctctt 445

<210> 63
<211> 161
<212> DNA
<213> Homo sapiens

<400> 63
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aaaaacaaaaa acctactagt cttgaacaaa ctgtcatacg tatgggacct acacttaatc 120
tatatgcttt acactagctt tctgcatttta ataggtttaga a 161

<210> 64
<211> 133
<212> DNA
<213> Homo sapiens

<400> 64
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tggctctatc aaggtgaacg ggcggccct ggagatgatt gagccgcgca cgctacagta 120
caagctgctg gag 133

22335_US_Sequence_Listing_060807.txt

<210> 65
<211> 524
<212> DNA
<213> Homo sapiens

<400> 65
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tcctgtactg cattgctgcc cttctgcttt atgttggcta cacgagtctg tatctggata 120
gtcgtaaact tcctatgata gactttgtt acatcttgt tgccactttt ttgtggttgg 180
tgagcacttc agcctgggct aaagctctga cagatattaa aatagctact ggtcacaata 240
ttattgatga acttccgcct tgtaagaaga aagcagttact gtgttacttt ggctctgtga 300
ccagtatggg atccctaaat gtatctgtga tatttggctt tctaaatatg atactctggg 360
gaggaaatgc ttgggttggta acaaggaga ccagcctaca cagtcacatca aatacatctg 420
cccctcatag ccaaggaggt attccacctc ctaccggaaat ataattaaag ggagaaatac 480
actgtatgaa gtatatgtt acatctatgac atgttgccaa cacc 524

<210> 66
<211> 511
<212> DNA
<213> Homo sapiens

<400> 66
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ttaagtgcag gctgagaccc agcctcttg taagtacagt aaaataatcc accgttttt 120
acagacccta gtcaaagggt taaaaaaatt aagattgctt tccatgtttt aaatttacca 180
ttgagagtca atgaagttgc tattttgagt ttagcattga tattgtgaaa ataagtgc 240
tttggatttc atgtttctta atattcattc ttgtttcaca aatgaatgtat taaggaatta 300
tgcatcataa aggaacctaa gtgaggtata tgatgagttt attgtctttg cacacacata 360
taggtatatt ctgaataacaa gcttattcat tttgcttcct aatcttttg ttgtacaggg 420
attcaggttt cttattctta caacatgatt gtttatatgt gaagcacatc ttgctgtgc 480
cttatttttg atgcttttat tcatgacaag a 511

<210> 67
<211> 371
<212> DNA
<213> Homo sapiens

<400> 67
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aacttcattt tagttgttgg tgaaaaagag aaaatcactg gcactgttaa tatccgcaca 120
agagacaata aggtccacgg ggaacgcacc atttctgaaa cttatcgacg gctacagcag 180
ctcaaagagt tccgcagcaa acaggcagaa gaagaatttt aatgaaaaaa ttacccagat 240

22335_US_Sequence_Listing_060807.txt

tggctccatg gaaaaggagg aacagcgaaaatt gactttgtac tcgaaaacgt 300
caatttatat tgaacttgga ggaggagttt ggcaaagtct gaaataggc aacctgcagg 360
cgtaactatt t 371

<210> 68
<211> 532
<212> DNA
<213> Homo sapiens

<400> 68
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caagtcgtgc acaccagaac gcattgtga gaactttaag gtcttgact ttgaactgag 120
cagccaggat atgaccaccc tactcagcta caacaggaac tggagggct gtgccttg 180
gagctgtacc tcccacaagg attaccctt ccatgaagag ttttgaagct gtggttgcct 240
gctcgcccc aagtgaccta tacctgtgtt tcttgccctca ttttttcct tgcaaatgta 300
gtatggcctg tgtcaactcag cagtgggaca gcaacctgta gagtggccag cgagggcgtg 360
tcttagcttga tggatctt caagagccct gtcagtagag tagaagtctc ttccagttt 420
ctttgccctt ctttctaccc tgctgggaa agtacaacct gaataccctt ttctgaccaa 480
agagaagcaa aatctaccag gtcaaaaatag tgccactaac ggttgagttt tg 532

<210> 69
<211> 461
<212> DNA
<213> Homo sapiens

<400> 69
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agcgccctgct tccctacttg ccatctgggg agtcgctgcc gcagaccgctg gatgagatcc 180
agaataccct gacctcgccc cagttccagc aggccctggg catgttcagc gcagccttgg 240
cctcggggca gctggggcccc ctcatgtgcc agttcggtct gcctgcagag gctgtggagg 300
ccgccaacaa gggcgatgtg gaagcgttt ccaaagccat gcagaacaac gccaagcccc 360
agcagaaaaga gggcgacacg aaggacaaga aggacgaaga ggaggacatg agcctggact 420
gagccacgctg ccttcctccg aggaacttggg cgcttgcagt g 461

<210> 70
<211> 542
<212> DNA
<213> Homo sapiens

<400> 70
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22335_US_Sequence_Listing_060807.txt

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ccacccttgc cacctggaag aattctctca ggcgtgttca gcaccctgtc cctcctccct	180
gtccacagct gggtccctct tcaacactgc cacatttcct tattgatcga tctttccca	240
ccctgtcact caacgtggtc cctagaacaa gaggcttaaa accgggcttt cacccaacct	300
gctccctctg atcctccatc agggccagat cttccacgtc tccatctcag tacacaatca	360
tttaatattt ccctgtctta cccctattca agcaactaga ggccagaaaa tgggcaaatt	420
atcactaaca ggtctttgac tcaggttcca gtagttcatt ctaatgccta gattctttg	480
tggttgtgc tggcccaatg agtccctagt cacatccctt gccagagggta gttcttctt	540
tg	542

<210> 71
<211> 356
<212> DNA
<213> Homo sapiens

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caggatttca taattgtcat tgtcacactt tcaaattttt gtacatcagt gaatttttt	180
atattaaaag gttgagccaa aaagcccca gtgtttgtat tttgaagcca agcttcactt	240
ctaaagtgcc tacagagact tgtaatgaa aatgcagctc tgcacgagtt tgaaaccgtc	300
atacctcctt ctattaggaa tggcatatac tgaggtggtc gtaagtctta acttct	356

<210> 72
<211> 409
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(409)
<223> n = any nucleotide

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tatcagatgt tgcctgtgtt tccataaaagc aaaatgctga ttttggtaaa aaacatnact	180
gcttctagag ctgggaggat ctgcagactt tcacggattc atgaaacaag aaaagaagca	240
tagtacttt taggtgccat taggtattga tcagtgaat ccttagggtgc tctatgagat	300
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<210> 73
 <211> 534
 <212> DNA
 <213> Homo sapiens

<400> 73
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 gtttcttac ttatgtgg ttggaatgag ggacgaccat atttatttca gtcagatcca 180
 tctggagctt actttgcctg gaaagctaca gcaatggaa agaactatgt gaatggaaag 240
 actttcttg agaaaagata taatgaagat ctggaaacttgc aagatgccat tcatacagcc 300
 atcttaaccc taaaggaaag ctttgaaggg caaatgacag aggataacat agaagttgga 360
 atctgcaatg aagctggatt taggaggctt actccaactg aagttaagga ttacttgct 420
 gccatagcat aacaatgaag tgactgaaaa atccagaatt tcagataatc tatctactta 480
 aacatgttta aagtatgttt tgtttgcag acttttgca tacttatttc taca 534

<210> 74
 <211> 299
 <212> DNA
 <213> Homo sapiens

<400> 74
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 ctttgcatt atgatttcat tattcacatga ttatagaagg ctgtcttagt gcaaaaaaca 120
 tacttacatt tcagacatata ccaaaggaa tactcacatt ttgttaagaa gttgaactat 180
 gactggagta aaccatgtat tcccttatct ttactttt ttctgtgaca tttatgtctc 240
 atgttaatttgcattactctg gtggattgtt ctgtactgtt attggcttc ttctgttaat 299

<210> 75
 <211> 533
 <212> DNA
 <213> Homo sapiens

<400> 75
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 tcagcttgcgt ggtgtggacc tgaacacagg tgagccatg gtggcagcag aagtagggcgt 120
 atgggataac tattgtgtaa agaaacagct tcttcactcc tgcactgtga ttgccaccaa 180
 cattctcttgcgt gttgatgaga tcatgcgagc tggaaatgtct tctctgaaag gttgaattga 240
 agcttcctctgtatctgaat cttgaagact gcaaagtgtat cctgaggatt acagctgtgg 300
 aatttttgtc caagcttcaa ataatttga aagaaatttt cccatatgaa aaaaggagag 360

22335_US_Sequence_Listing_060807.txt

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gcagtgacat	aaaattccat	gttagataag	catatgttac	ttaccttgtt	att	533
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<211>	424					
<212>	DNA					
<213>	Homo sapiens					
<400>	76					
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tcatctcagt	ggatataatcc	tcccaaaagg	aaacaaggc	aaggcttatac	tttgtgtcaa	300
aacggagagt	cacccaactg	tgtggaaagac	aagatgctct	cgacagttgc	agtacttacc	360
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ctca						424
<210>	77					
<211>	356					
<212>	DNA					
<213>	Homo sapiens					
<400>	77					
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acgatcacag	tggtctccag	cactaactat	ttcaaaaagta	ctctgtcca	tctgttctct	300
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<210>	78					
<211>	484					
<212>	DNA					
<213>	Homo sapiens					
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cgagtacaac	aaagccagca	acgacatgta	ccacagccgc	gcgcgtgcagg	tggtgcgcgc	120
ccgcaagcag	atcgtagctg	gggtgaacta	cttcttggac	gtggagctgg	gccgaaccac	180
gtgtaccaag	acccagccca	acttggacaa	ctgccccttc	catgaccagc	cacatctgaa	240

22335_US_Sequence_Listing_060807.txt

aaggaaagca ttctgctctt tccagatcta cgctgtgcct tggcagggca caatgac	300
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ctcttatgca cacctccac cccctgtatt cccacccctg gactggtggc ccctgcctt	420
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tgtt	484
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<211> 321	
<212> DNA	
<213> Homo sapiens	
<400> 79	
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<211> 468

<212> DNA

<213> Homo sapiens

<400> 82

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<210> 83

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<212> DNA

<213> Homo sapiens

<400> 83

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<210> 84

<211> 251

<212> DNA

<213> Homo sapiens

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<210> 85
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<212> DNA
<213> Homo sapiens

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<212> DNA
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<223> n = any nucleotide

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22335_US_Sequence_Listing_060807.txt

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<210> 87
<211> 539
<212> DNA
<213> Homo sapiens

<400> 87
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<210> 88
<211> 568
<212> DNA
<213> Homo sapiens

<400> 88
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ataacttctta tgttggtttc agtggctg 568

<210> 89
<211> 340
<212> DNA
<213> Homo sapiens

<400> 89
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22335_US_Sequence_Listing_060807.txt

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<212> DNA
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<400> 90
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<210> 91
<211> 518
<212> DNA
<213> Homo sapiens

<400> 91
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<210> 92
<211> 522
<212> DNA
<213> Homo sapiens

<400> 92
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<211> 419
<212> DNA
<213> Homo sapiens

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<210> 94
<211> 487
<212> DNA
<213> Homo sapiens

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22335_US_Sequence_Listing_060807.txt

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<211> 289
<212> DNA
<213> Homo sapiens

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289

<210> 96
<211> 466
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (321)..(322)
<223> n = any nucleotide

<400> 96
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466

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<211> 393
<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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cacgttagagt tcagacccctt ctgaactctg ttgataatac cacacca 407

<210> 102
<211> 507
<212> DNA
<213> Homo sapiens

<400> 102
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<211> 310
<212> DNA
<213> Homo sapiens

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 <212> DNA
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 aactggtata ctcatgtcaa tattct 566

<210> 105
 <211> 534
 <212> DNA
 <213> Homo sapiens
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<210> 106
 <211> 443
 <212> DNA
 <213> Homo sapiens
 <400> 106
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tttctgtacc atctatgtgc aattatactc taaattccac tacactacat taaagtaat 240
ggacattcca gaatatacat gtgattatag tcttaaacta attattatta aaccaatgt 300
tgctgaaaat cagtgtatgc tttgttatag agtataactc atcgtttaca gtatgtttt 360
gttggcagta tcatacctag atggtaata acatattccc agtaaattta tatagcagt 420
aagaattaca tgccttctgg tgg 443

<210> 107
<211> 333
<212> DNA
<213> Homo sapiens

<400> 107
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ataatccatata tataattttt tatcatgatt attgactata ttttggagt cccattgtt 180
cagtggccat taacagaatg cttaaaaaac ttctaaagaca agaatctata gcatttagtat 240
acactggcac ataatttttt aaaaagtttt aagaaaagat tcatttgaa ttttattcac 300
agtataaaat tccctcacct gaagtaactt tgt 333

<210> 108
<211> 555
<212> DNA
<213> Homo sapiens

<400> 108
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tctaaaaaag aagattgcag tcatccattt atatgcattt ggtctgatcg caaatacact 120
aaatgtggag ttaggaacc aaaaatgaaac ctgctgtatg gaaactactt tcacttatgg 180
ttcattggtt tttgtaccaa tatttttat gcacttcagt gcaagtcttgc tcagttacc 240
ttactttatg agtaagctaa ataacccaaa ttacatttct tttaaacctgt tttactacta 300
tggcactttt ataaaatggt caggaaccaa cttaactggc aaaagggtcc atgtaccacc 360
atgtgctgga gcatctgttc tacatgtgga tatctatgaa tggtaatgtt ttccttcatg 420
taagtgccta ttcagagttt cagaattttt aatgcacaa tattttcatg gtcatttgca 480
tgttagtaagc cagaaaatat tcaaagagat tttgaaaacc aattgtatcc aaccagcctc 540
aaattgtgca accat 555

<210> 109
<211> 520

22335_US_Sequence_Listing_060807.txt

<212> DNA
<213> Homo sapiens

<400> 109
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gctgtggggg agaagggttct acagcataag ccttatcctg ccagccaagg ggatttattc 120
taagagaagt gcatgtgaag aatggttgcc actgttatta gattgacaag atgttaattt 180
ctctgttagt tgtaacttta aaaataaatg aaattattta agggttatgc tgcactagta 240
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aaggctgtta atagtagtttta agtgttaaga ctgctttct ttaacgtttt catggtaatg 360
catattttaga gcactgtatt ttgtcttgt taagaaaatt tagcatttct aaaagaaaaaa 420
agcaaccctc tttcaaactg ttaattctgt cacagcctgt atattttagt catttgtaaa 480
tctcttcata caatagtgac ttctttttt actgatacag 520

<210> 110
<211> 310
<212> DNA
<213> Homo sapiens

<400> 110
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ggagccagtt tgccattcgc tggggcttta tccctcttgt gatttacctg ggatttaaga 120
gggggtgcaga tcccggaatg cctgaaccaa ctgttttgag cctactttgg ggataaaagga 180
ttattttggtc ttctggattt ggaggcaatc agcggacagc atggaagatg tgtgctctgg 240
ctcggataag agatgggaca tcattcagtc actagttgga tggcacaagg ctcttcacag 300
acgcacatctgt 310

<210> 111
<211> 545
<212> DNA
<213> Homo sapiens

<400> 111
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ggcaagggtac atttaatcag taaatcagtt tcacatcatg tattgtgatg tttcaatgt 120
agacacaaaa acaatggctt gaaacttgtg tatcatatgt gatttgaaa tgaacacctt 180
gaatagcact aattttattt tgtggtattt ttctataaca aaacaagtag ctcttagaaa 240
agaggtttta tttttaaac gatcatttgt gacctcagac actctctggc taatattta 300
ataagctcac agcagataat tctgagatca tgggtgaggg gtggtgcatg ttgagattta 360
aattggcata aagctgcata cttttgtct agctgttga tttcattttt taatatagtt 420
tgccaattttt gtgactgtta ccatgtgaaa gtcctgttga aatgaacaat tgtctgcccc 480

22335_US_Sequence_Listing_060807.txt

acaatcaaga atgtatgtgt aaagtgtcaa taaatctcat atcaaatgtc aaactttac 540
atgtg 545

<210> 112
<211> 463
<212> DNA
<213> Homo sapiens

<400> 112
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ccaacacaaa aacagattga tgctgcctca ttcacgctga cattcttgg tcaaggatac 120
agccaaaggca ctggcacaga taagaacaaa ccaaatatca aaatttgcac tcaggtgaaa 180
ggaccagagg ctggctatgt ggctacccccc atagctatgg ttcaggcagc catgactctt 240
ctaagtgtatg cttctcatct gcctaaggcg ggcgggtct tcacacctgg agcagcttt 300
tccaaaacaa agttgattga cagactcaac aaacacggta ttgagtttag tgttattagc 360
agctctgaag tctaaacact ggaagaatta actgaagtca taacgtgcgt gaattaacag 420
cttctctatt tgatatttga aattcttctg taaggctgtc tga 463

<210> 113
<211> 474
<212> DNA
<213> Homo sapiens

<400> 113
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ttcaagtaaa atgtctgggt gtgccagaca tttcacaagt gtgaaaggag ataggagaag 120
ctcaacttga gggcgtgttag taagttgttag aaggctcgag gggacgtgga cttatttgcc 180
ttggtttgca atacctgcaa ataatgagtt tgaaaagaaa caatgaaatg tgtaaaaaat 240
ttgaccatat tagataaatt ttggtgatt tagtcataag atggaaaaag actggtaat 300
cttttattac aaaatgttgc tggtaaaatg ggatcatcat ctttggaaagg ggggaggagg 360
agtaaaaagcc cgattataat ggtgatcaat tcaagtcagt gttgactatt ctgtgaaata 420
tatttggcca gtggaaatga taatcagaaa agactgtaaa tagatccatc caaa 474

<210> 114
<211> 378
<212> DNA
<213> Homo sapiens

<400> 114
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ttaattctgg attcatcatg gctttctaat accaattgtt atatttacaa tattcaccaa 120
aacttagaat ttgcaaatg caggaattct gccagtgtt ctttgcataag cttgcattgc 180

22335_US_Sequence_Listing_060807.txt

aaaatttgaa	attttaacat	tggcacccaa	aacctacatg	aatgtatgt	ctggagtatt	240
tcaaacttta	cattgaaaca	taatttcctt	ggaaaacaaa	ccataagcct	gaggaggtt	300
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catttaacct	gccgatta					378

<210> 115
<211> 497
<212> DNA
<213> Homo sapiens

<400> 115	ggacgcacag	catgagtctg	gacggagtag	ctccaagagc	tctcactgtg	acagcccacc	60
tcgctcgcag	acaccacaag	ataccaacag	ggcttctgaa	acagataccc	atgcattgg		120
agagaaaaac	agtcacagt	ctgaggaaga	tgatattgaa	agaaggaaag	aagttgaaag		180
catcttgaag	aaaaactcag	attggatatg	ggattggtca	agtccggccgg	aaaatattcc		240
ccccaggag	ttcctcttta	aacacccgaa	gcgcacggcc	accctcagca	tgaggaacac		300
gagcgtcatg	aagaaagggg	gcatattctc	tgcagaattt	ctgaaagttt	tccttccatc		360
tctgctgctc	tctcatttgc	tggccatcgg	attggggatc	tatattggaa	ggcgtctgac		420
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cttctgagct	tgcaaca						497

<210> 116
<211> 488
<212> DNA
<213> Homo sapiens

<400> 116	aaaggcatt	tttcacatat	aagtggctta	accaatattt	tcaaaagaac	ttcatcattg	60
tacaactaac	aacagtaact	agcccttaat	tatggtaca	gttccttatt	ggtgtgtgt		120
agattactct	agcaactatt	acagtataac	acagatgatc	ttctccacac	accccatcac		180
ccagataatt	tacagttctg	ttaacagtga	ggttgataaa	gtattactga	taaaaaattta		240
tctaaggaaa	aaaacagaaa	attatgggt	gtggccatct	tacctgctta	tgtctcciac		300
acaaagctaa	atattctagc	agtgtatgaa	tgaaaaattta	catcttactg	ttgatataatg		360
tatgctctgg	tacacagatg	tcattttgtt	gtcacagcac	tacagtgaaa	tacacaaaaaa		420
atgaaattca	tataatgact	taaatgtatt	atatgttaga	attgacaaca	taaactactt		480
ttgctttg							488

<210> 117
<211> 555
<212> DNA

22335_US_Sequence_Listing_060807.txt

<213> Homo sapiens

<400> 117	
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ggcggaggga aaatgccgag gagttagcag ccagacaaag agtagagaa aagatcgaga	120
gggacaaagc agagagagcc aagaagtatg gtggcagtgt gggctctcag ccaccccccag	180
tggcaccaga gccaggtcct gttccctttt ctcccagcca ggagcctccc accaagcggg	240
agtatgacca gtgtcgata caggtcaggc tgccagatgg gacctcactg acccagacgt	300
tccggcccg ggaacagctg gcagctgtga ggctctatgt ggagctccac cgtggggagg	360
aactaggtgg gggccaggac cctgtgcaat tgctcagtgg cttccccaga cgggccttct	420
cagaagctga catggagcgg cctctgcagg agctgggact cgtgccttct gctgttctca	480
ttgtggccaa gaaatgtccc agctgaggc ctttgtccca ttgtccctct gtgacccctt	540
catcttgat aaagc	555

<210> 118

<211> 391

<212> DNA

<213> Homo sapiens

<400> 118	
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gttacttcat cacaatctac ataggctcac cagctagaaa catttatgag cttacattcc	180
ttcttccat atcttatcag catatcatat ccatttcaact ccaacactct gtcttgaatt	240
tggccctccc tctccctct ctacitaaat tcattggagc atgggatttg gagtttagtg	300
gttttgggtt tgaattccag ctctactatt tttgggttg tgatagagtt atttaacctc	360
tctgagcctc agttccctcg tatgtaaaat g	391

<210> 119

<211> 532

<212> DNA

<213> Homo sapiens

<400> 119	
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aagagaaaga agaaggcatg gaagagaatg gttactaaag tgtgctttgt tggagatggc	120
tttacaagaa aaccaccaa atatgaaaga ttcattcaggc caatgggctt gcgtttcaag	180
aaagcccatg taacacatcc tgaactgaaa gccaccttt gcctaccaat acttgggtta	240
aagaagaatc cctcatcccc actgtataca actttgggtg ttattaccaa aggtactgtc	300
attgaagtaa atgtgagcga attggccctt gtgacacaag gaggcaaagt tatttggga	360

22335_US_Sequence_Listing_060807.txt

aaatatgccc	aggttaccaa	caatcctgaa	aatgatggat	gtataaatgc	agtcttactg	420
gtttgacagc	aatttcatat	ataattattg	aggactacac	accaattgaa	gaaactgcc	480
ttactgtgat	gtttctgaat	actaccaaac	agccatacat	gtctgcaatg	aa	532
<210> 120						
<211> 416						
<212> DNA						
<213> Homo sapiens						
<400> 120						
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tgaagtggta	gcatgctctg	ttgattcaca	gtttacccat	ttggcctgga	ttaataaccc	120
tcgaagacaa	ggaggacttg	ggccaataag	gattccactt	ctttcagatt	tgaccatca	180
gatctcaaag	gactatggtg	tatacctaga	ggactcaggc	cacactctt	gaggtcttt	240
cattattgat	gacaaaggaa	tcctaagaca	aattactctg	aatgatcttc	ctgtggtag	300
atcagtggat	gagacactac	gtttggttca	agcattccag	tacactgaca	aacacggaga	360
agtctgccct	gctggctgga	aacctggtag	tgaaacaata	atccagatc	cagctg	416
<210> 121						
<211> 423						
<212> DNA						
<213> Homo sapiens						
<400> 121						
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tttgaacgca	tattgacagc	acgcttact	tagtagccgg	ttcccatgg	ccatacaatg	180
taggttctgc	ttaatgtaac	ttctttttt	cttaagcatt	tgcatgacta	ttagtgcctc	240
aaagtcaatt	tttaaaaaatg	cacaagttat	aaatacagaa	gaaagagcaa	cccaccaaac	300
ctaacaaagga	cccccgaaca	ctttcatact	aagactgtaa	gtagatctca	gttctgcgtt	360
tattgtaagt	tgataaaaaac	atctggaaga	aaatgactaa	aactgtttgc	atctttgtat	420
gta						423
<210> 122						
<211> 533						
<212> DNA						
<213> Homo sapiens						
<220>						
<221> misc_feature						
<222> (231)...(231)						
<223> n = any nucleotide						
<400> 122						

22335_us_Sequence_Listing_060807.txt
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ctggaggcca tgcctttaa gcatgtgtaa aattttaaa gaaatgaaca tacacatagt 120
tattttagta atatccctg aaagaaaaac caaattctgc tataagtctt gatcttcaat 180
gaactttaa ataatgcatt tagctggaaa acaagacttt cccagcttgt nttacctaga 240
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tatttgcggg tctaattctaa tattagaata tattaaccgc ttaaggcatt gaagccatat 360
gggatgggaa atgcatttct tcagtgttgc tccgagagac tttccatttc cttggaggtta 420
tggcggcaag taagtatcat agtattaaga aatttgccta aatctgagtt gtgccttct 480
ttactcacaa ggcattggct ttgtcctggatcagtttgc taagccttct tcc 533

<210> 123
<211> 527
<212> DNA
<213> Homo sapiens

<400> 123
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aaagaagcaa catgacaata gagagaggtt tgctacaatt atttcttgggt ttccacttgc 180
aatggtaat taagtccaaa aacagctgtc agaacctcga gagcagaaca tgagaaactc 240
agagctctgg accgaaagca gaaagttgc cggaaaaaaa aaagacaaca ttattaccat 300
cgattcagtg cctggataaa gagaaagct tacttggta atggcagcca catgcacgaa 360
gatgctaaga agaaaaagaa ttccaaatcc tcaacttttgc aggttcggc tctccaattt 420
aactcttgg caacaggaaa caggtttgc aagttcaagg ttcactccct atatgtgatt 480
ataggaatttgc tttgtggaaa tggattaaca taccgtctt tgcctaa 527

<210> 124
<211> 495
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (287)..(287)
<223> n = any nucleotide

<400> 124
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tgagtgatta ctgggttggtt ggaaagaagt ctgatcggcg ggagcctcta tgttattttg 180
aatcaaaaaaa atgcaaacct gattgaagta aatgaagagg tcaagaaact ttgtgcaacg 240

22335_US_Sequence_Listing_060807.txt

cagttcaaca acatcttctt	cttggattga	cgatgacgg	ctcacccngag	agcatatcta	300
aaaaaacactc	tgcaaacatt	tggcacatg	caagtttagt	gtcatatgac	360
caggacaagg	gtaaagcaat	acttgcttg	aagaatcaca	tttcgactcg	420
ctgaggtttt	tagattttaa	atattatgt	ggaattaatt	aaaggttagtt	480
ctatcatttc	attct				495

<210> 125
<211> 386
<212> DNA
<213> Homo sapiens

<400> 125	tgcccttag	ggccagagc	ggcaggagg	ttggataaca	aaaatagagc	atcagcaacc	60
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ggtaagtgc	tatcttcc	ccccgcttgg	tagcctcaca	gatgagtctt	ggatgcattc		180
acagtcat	ctggctgtg	caccaaagga	tgcattcagt	gacctatgaa	aaaccctact		240
gaagggtcca	gagaccctgg	tgctcacctt	agccttgc	ttttagcaaa	taacttac		300
tcttccttct	tatgcctggg	tttctcaca	cttaaatctg	tactactgtt	tgccaatgtc		360
tgtatgtgt	atccctgggtt	cacaag					386

<210> 126
<211> 543
<212> DNA
<213> Homo sapiens

<400> 126	acttcacc	tcagccctaa	agagggagcc	tgtggttct	cagagagata	tcacaattt	60
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agtacagtca	agaagagggaa	agtgtgtgaa	gacccagg	tggctctg	acttgcc		180
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ggacctt	gctcactt	gccaggagg	cagtgt	catggtt	tgacttt		360
agtcgct	ccagggtgag	gacctggcc	tcctgact	tggccc	agagtt		420
tcagttcata	ctgcaattt	atgtgaaagc	attatgact	tcctacccat	gggagagtaa		480
atgttagatt	aatgcttag	gtctaaagc	tggagagt	agat	tttag		540
ggg							543

<210> 127
<211> 479
<212> DNA

22335_us_Sequence_Listing_060807.txt

<213> Homo sapiens

<400> 127	
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atacgtttgc cagctggttt ggctacatgc cgctgatcca ctctcagatg aggctcgacc	180
ccgtcctctt taaagaccag gtctctattt tgaggaagaa ataccgagac attgagcgcac	240
ttttaggaat ccggctgagt gggggagggg aagcaagaag ggtatgggggt caagctgctc	300
tctctccca gtgcagatcc actcatcagc agagccagat tgtgccaact atccaaaaaac	360
tttagatgagc agaatgacaa aaaaaaaaaa ggccaatgag aactcaactc ctggctcctg	420
ggactgcacc agactgcctcc aaactcacct cactggcttc tgtgtcccaa gactagtt	479

<210> 128

<211> 555

<212> DNA

<213> Homo sapiens

<400> 128	
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aaggaacatt tcattggttt tttttgtcca ccccatctc cttgctcat ttggatgcgt	120
cacctaatt ctcctgctgc caccgtctt gattcaccgg gatgtacagt ttacagttga	180
agagcaaaca gaaagggttt ctcttggtgg gatatgcaga acttggatg tgtgtatata	240
taaatatata atatatataa atatatataa tactgactta aaaaatcaa tccccgaca	300
tacgtttttt ttaatctgtc caaaaatgt gttttcagag gaaatcttatt tttcatattc	360
agactttgtt ttgcccactc atttgtataa gtgcgttcg gtacagcacg ggtcctgctc	420
ccgcgtatgt gaaatgtcac acggcacctg tacaaaaaga ctggctaacc cctcttccta	480
ttaccttgat ctcttcccccc aacttcctaa cacttattaa tttatgaaac tgaaaaatc	540
agcgcagttt tgttt	555

<210> 129

<211> 511

<212> DNA

<213> Homo sapiens

<400> 129	
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ggtggatgtatgt aatgagcagc ccctcccaga tagaatgtca atatttgc agtaggat	180
tggcatttgt tagttaaagg cttaatcaa aagaatgtcc aatggtagga atttcaaggt	240
gttaggtcaga tatggatgaa tagggattt ttgtatgtc cttaaatta taccaaagat	300

22335_US_Sequence_Listing_060807.txt

tactaattat	tcctcttgc	ccaaaatact	tgcatccaag	gttctagtct	ctgttgctgt	360
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aggtaacgga	tggggctggc	accagatgtat	gtcccaccac	agtccctcac	ctccggcctc	480
cacatgacag	aaccaattta	cactcaacca	t			511
<210> 130						
<211> 468						
<212> DNA						
<213> Homo sapiens						
<400> 130						
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gccagagatg	tactgttatt	agctgggaag	accaattcta	acagcaaata	acagtctgag	180
actcctcata	cctcagtgtt	tagaagcatg	tctctttga	gctacagtag	aggggaaggg	240
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aactccccac	tgcctgtccc	agagaggctt	tccaatgttag	ctcagtaatt	cctgttactt	360
tacagacagg	aaagttccag	aaactttaag	aacaaactct	gaaagaccta	tgagcaaatg	420
gtgctgaata	ctttttttt	aaagccacat	ttcattgtct	tagtcaaa		468
<210> 131						
<211> 409						
<212> DNA						
<213> Homo sapiens						
<400> 131						
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gcccttgtgt	aacattgcaa	acctgtggct	ttgcaaaatg	tacccaggtc	acaagggat	360
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<210> 132						
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<212> DNA						
<213> Homo sapiens						
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22335_US_Sequence_Listing_060807.txt

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aaaatacagc	aagctaaaaa	tgaaataaga	gagtgggagg	cgaaagtgc	acaaggggaa	360
agagattttg	aacagatatc	taaaacgatt	cgaaaagaag	tggaaagatt	tgagaaagaa	420
cgagtgaagg	attttaaaac	cgttatcatc	aagtacttag	aatcactagt	tcaaacacaa	480
caacagctga	taaaatactg	ggaagcattc	ctacctgaag	cca		523

<210> 133
 <211> 564
 <212> DNA
 <213> Homo sapiens

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<210> 134
 <211> 562
 <212> DNA
 <213> Homo sapiens

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ctgtaacttc	attttggaaa	tgcttctcca	ccaaataagg	gcttttccc	ctatttaagg	360
agccagatgg	attgaaagat	gtggaaatag	gcagctgtag	atcttgcatt	tccaggtacc	420
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22335_US_Sequence_Listing_060807.txt

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gggcattgtc tgtttcttt gt			562

<210> 135
<211> 343
<212> DNA
<213> Homo sapiens

<400> 135			
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gcttcgtccc tgccaaggga	attaatgtta tcttgtgaaa	ggtgttgctg tttgaattga	180
tgagaaatgg aagatgagaa	ctccctaaga gttctcataa	taaatcatct catcacaaat	240
caatacggta tacagagtta	aagtggaaatg aggtaagaag	atacagctac agaaaatagt	300
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<210> 136
<211> 531
<212> DNA
<213> Homo sapiens

<400> 136			
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ccttcctcag gctgcctaag	acatgtaagc gaaacacttc	aataattgtc catgaggaga	180
aaaaaaagcat tgcgtatgt	gaaggaaact gaacttgagg	tggcctccctt gcttgttaca	240
tacctgggta tgcgttaggca	gttttagtgca tcttgcctc	tcagttgaaa cctgtataac	300
cctgttacaa agctgtgttg	ttgcttcttg tgaaggccat	gatattttgt tttttccca	360
attaattgct attgtgttat	tttactaact tctctctgt	ttttttcttg cattgacatt	420
atagacattt aggacctcat	ccaaacaatt taaaaatgag	tgtgaagggg gaacaagtca	480
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<210> 137
<211> 490
<212> DNA
<213> Homo sapiens

<400> 137			
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atttcttagc tataatcagc	acatcactta gttcaaacaa	aattccccag caaatgttag	180
atagtaggtt tatcagtcac	ctggggagtt ttcttcataa	tatgcatatt catcttgtaa	240

22335_US_Sequence_Listing_060807.txt

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atataattct agtataaaaaa tattttggac agttgcttaa catggtcata agaggatttg 420
tactatagaa tatcttctag tactaatttt tctgttagagc aaattatatt tctctcactg 480
gatagttttt 490

<210> 138
<211> 525
<212> DNA
<213> Homo sapiens

<400> 138
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ctgaagaccg tgcaggcggt cctcactgtc cccaaagctga agctgagttt cgaaggcgaa 180
gtcaccaagt ccctgcagga gatgaagctg caatccttgtt ttgatttacc agacttttagc 240
aagatcacag gcaaaccat caagctgact caggtggAAC accgggctgg ctttgagtgg 300
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ccgctggact atcaccttaa ccagccttcc atcttcgtac tgagggacac agacacaggg 420
gcccttctct tcattggcaa gattctggac cccaggggccc cctaataatcc cagtttaata 480
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<210> 139
<211> 540
<212> DNA
<213> Homo sapiens

<400> 139
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ttggggtccc cagtggggaa tgaacgggta cttcctcatc gagcgcggaa agaacatgtg 180
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gaggaagttg tggggagatc cactgggacc cccaaacattc tgccctcacc tctgtgccc 360
gcctggaaac ctacagacaa ggaggagttc caccatgagc tcaccgtgt ctatgacgca 420
aagatcacca gccatgtgcc ttagtgtcct tcttaacaga ctcaaaccac atggaccacg 480
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<210> 140

22335_US_Sequence_Listing_060807.txt

<211> 257
<212> DNA
<213> Homo sapiens

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ttccaggact ggctactgcg tacatccaca gttcactaa cggggcaag gaaaaaagg 180
ttgctcattt tggtatcac tggagtctga tggaaagaga taggcgcac tctggagttg 240
atcgttacta tgtgtca 257

<210> 141
<211> 463
<212> DNA
<213> Homo sapiens

<400> 141
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cgccgtctg taaataagcc cagtgcgtc gtaaataacag gaagaaagag cttgaggtgg 360
gagcggggct gggaggaagg gatggggccc gccttcctgg gcagccttc cagcctcctg 420
cctggctctc tcttcctacc ctccctccac atgtacataa act 463

<210> 142
<211> 513
<212> DNA
<213> Homo sapiens

<400> 142
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ttacttctgc acttaaattt ttttaataa catgatgatg gtacatttc ctctattgtc 180
tagctaaggc ctttcggtcc accagtaaat aagatcaaat gctcttaat gttcctgtta 240
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ttaatgctgg cattaagatc atgagccctt tttctccagt agtacaggct ttgaaaacta 360
cttctattaa gttattgatg caatttgata ttttttata atctatattt aaacaaaatt 420
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22335_US_Sequence_Listing_060807.txt

<210> 143
<211> 397
<212> DNA
<213> Homo sapiens

<400> 143
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agaagagaaa aagcaaacag aaattggggg cgaaaaatgatgcaaga aatttacagg 180
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acattgaaga cattccttat gtgtagtgtc cctggcaggc atttaccagg ccatgtgctt 300
taacgttacg gtaataacttt actttaggca tccctcctgt tgctagcagc ctttgacct 360
atctgcaatg cagtgttctc agtaggaaat gttcatc 397

<210> 144
<211> 441
<212> DNA
<213> Homo sapiens

<400> 144
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taatgcatgt ccgtgggtgg g 441

<210> 145
<211> 496
<212> DNA
<213> Homo sapiens

<400> 145
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ttgtgtttgc tttttaaat aaagtgcgtc tatttgtatt ctccatattt tggagtaatt 180
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22335_US_Sequence_Listing_060807.txt

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ttctgcacga	tctgtat					496
<210>	146					
<211>	475					
<212>	DNA					
<213>	Homo sapiens					
<400>	146					
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ggcagatctg	gacagcagaa	tgttataacg	caagttcatg	tgttgctccc	aactc	475
<210>	147					
<211>	519					
<212>	DNA					
<213>	Homo sapiens					
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ttatacacaa	agaataacttt	cattatttgt	ggaattttgt	gcatttcaaa	aagtaatcat	480
atatcaaact	aggcaccaca	ctaagttcct	gattatttt			519
<210>	148					
<211>	530					
<212>	DNA					
<213>	Homo sapiens					
<400>	148					
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22335_US_Sequence_Listing_060807.txt
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<210> 149
<211> 477
<212> DNA
<213> Homo sapiens

<400> 149
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tctggcctt ctgtgactga ctgtgaagtg gcttctccgt acgattgtct ctgaaac 477

<210> 150
<211> 282
<212> DNA
<213> Homo sapiens

<400> 150
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gacacttgaa gactcgacc acaagccatg gaagggtggg tgccactgct gccgtgtaca 120
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aggatctcaa agtaaagcgt atcactccgc gtcacttgca gcttgcaatc cgtggtgatg 240
aagagttgga ttctcttatac aaggctacca tagctggggg tg 282

<210> 151
<211> 169
<212> DNA
<213> Homo sapiens

<400> 151

22335_US_Sequence_Listing_060807.txt

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agaagattgt gaatatttcc atatggattt tctattgtta ctctggttc	169
<210> 152	
<211> 454	
<212> DNA	
<213> Homo sapiens	
<400> 152	
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<210> 153	
<211> 532	
<212> DNA	
<213> Homo sapiens	
<400> 153	
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caaaggagct tgaaggatat tgtcagtctt taggggttgg gctggatgcc gaggtaaaag	180
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tataaaagaag gttgggtgaat ttcacaagct atttttgaa tatttttaga atatttaag	480
aatttcacaa gctattccct caaatctgag ggagctgagt aacaccatcg at	532
<210> 154	
<211> 401	
<212> DNA	
<213> Homo sapiens	
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tagcaactaa tgagatgtgg cgatcagggg atagtgaagt ttaccaactg ggtgatgtca 240
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atcaaatatgt gaaaaaggggg tctcgaattt atttggaaagg gaaaatagac tatggtgaat 360
acatggataa aaataatgtg aggcgacaag caacaacaat c 401

<210> 155
<211> 513
<212> DNA
<213> *Homo sapiens*

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gtctgttctt tcttgccaga agttatctac aagatgagac aaacagatcg ggatgtaata 180
acagcattaa ctcacagacc ttggagccta agccatacag gagatggaa accacgctat 240
gatactttct ggaaacattt tatatttgtt atgatggaca ttttgctcga ttggagcatg 300
cataatatct tgtggtacct gtgtggaatt tcagcttcc tcatgcaaaa ggattttgta 360
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aatacctttg atgaaaagag ttactacgaa tcccacatctt gttccagcta tatcactgac 480
aagcatqgtag aagactgacgaa acctcacttc tag 513
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<210> 156
<211> 526
<212> DNA
<213> *Homo sapiens*

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<220>
<221> misc_feature
<222> (277)..(277)
<223> n = any nucleotide
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420
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22335_US_Sequence_Listing_060807.txt

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<213> Homo sapiens

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<212> DNA
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<211> 504
<212> DNA
<213> Homo sapiens

<400> 159
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Page 59

22335_US_Sequence_Listing_060807.txt

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22335_US_Sequence_Listing_060807.txt

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22335_US_Sequence_Listing_060807.txt

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<211> 424
<212> DNA
<213> Homo sapiens

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Page 62

22335_US_Sequence_Listing_060807.txt

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<212> DNA
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gcccttgcattt gaaaaactgt ttatttttt cagtggaaaaa ggaattctgc ttctgtttt 240
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<212> DNA
<213> Homo sapiens

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22335_US_Sequence_Listing_060807.txt

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<212> DNA

<213> Homo sapiens

<400> 169

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gaaccctcc cattaaagat ccgggcagga ctggcacagg ttggaagtgt gatgggtggg	480
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<211> 557

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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22335_US_Sequence_Listing_060807.txt

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22335_Us_Sequence_Listing_060807.txt

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22335_us_Sequence_Listing_060807.txt

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<212> DNA
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tacttcctga gaggcaatgt ttttacttta tgcataattc attgttgcca aggaataaag 180
tgaagaaaca gcacccaaaaa aatataagg tctctctgga agagacctaa atttagaaag 240
agaaaaactgt gacaattttc atattctcat tctaaaaaaa cactaatctt aactaacaaa 300
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gaaaacatga gacaggatta tagtgcctta accgatataat tttgtgactt aaaaaataca 480
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actgatgctt gttcttattt 560

<210> 182
<211> 547
<212> DNA
<213> Homo sapiens

<400> 182
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tcctggcactt aggttataca gaccccgagcc ccattcccat ctactgaaac agggtctcca 120
caagaggggc cagggaaatat gggttttaa caagcgtttt acaaaacact tctctatcat 180

22335_us_Sequence_Listing_060807.txt

gcagccggag agctggctgg gagccctttt gttttagaac acacatcctt cagcagctga	240
gaaatgaaca cgaatccatc ccaaccgaga tgccattaaac attcatctaa aaatgttagg	300
ctctaaatgg acgaaaattt ctctcgccat cttataaca aaataaacta caaattcctg	360
acccaaggac actgtgttat aagaggcgtg ggctccctg gtggctgacc aggtcagctg	420
ccctggcctt gcacccctct gcatgcagca cagaagggtg tgaccatgcc ctcagcacca	480
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ctgtggt	547

<210> 183
<211> 398
<212> DNA
<213> Homo sapiens

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gacactcccc cgcagggcca acccctgccc tggctctg ccctgcaggg gtcccgccgc	180
atggtcacct ggggtgcaca caggtcacac agtgc当地 a ggc当地 caggg cccaggact	240
ccccccacag cagggtggg a cccggaccc gcggctcagt ggcccgctag ccacgtcagc	300
caagccactt taggtccatt ttttaatttt aacagtgc当地 ttccatctg tgc当地 aagcc	360
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<210> 184
<211> 423
<212> DNA
<213> Homo sapiens

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gaggttcagt tttttttttag gttttttttagt gttttttttagt tttttttttagt	300
gttatggcag tggaggtggg aatttagtcc ccaggtggga caagggaaat tttttttagt	360
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tgc	423

<210> 185
<211> 525
<212> DNA

22335_US_Sequence_Listing_060807.txt

<213> Homo sapiens

<400> 185
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ctacccacg gaactgttgg gaggctcaga tgagatgcta tatgtgaaaa cattctgtaa 180
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caagggttct ggaggagggaa agggtctgca ggttccatgg gtgacagcct gagatctgtc 480
ccttcaacgg gctgggctgg gtatgtgcct accgatgaca atgtg 525

<210> 186

<211> 514

<212> DNA

<213> Homo sapiens

<400> 186
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gaccatgc cctccgacctt caagggcatg ctctccaccc acctgacgtc catgttcag 180
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cgcaatcccg ccaccaccaa ccagacggag tttgagcgcg tcttctgagg gcccgcctt 300
gccactaggg ctcttgcgtt tttttcttc tgctatgtga cttgcacgtt ggagacaggg 360
catttgagtt tatatctctc atgcataattt tatttaatcc ccaccctggg ctctggagc 420
agcccgctga gtggactgga gtggagcatt ggctgagaga ccaggagggc actggagctg 480
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<210> 187

<211> 425

<212> DNA

<213> Homo sapiens

<400> 187
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ggctggaggt attaggagat gggagtagag attcacttt aagttcttga aaatataatgc 180
attctcctaa atattaacaa aaatgatttg gggaaatgac atggcttgcat tttctgttt 240
aaatttgcgttac tttggcttat gttacacatg ttcacatgtca cctctcattc acctgtttta 300

22335_US_Sequence_Listing_060807.txt

tatggtttaa aattctcttt aacaaaattc agaaaaattca cctgaaacgt attttgacct 360
aaaagaaaaca tatttttgcata tcagtattga attttggaca gtgcggccat ataaggaagt 420
tactg 425

<210> 188
<211> 530
<212> DNA
<213> *Homo sapiens*

<400> 188
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gaggtccctg gtcggagagg gacatagaat ctgtgacctc tgacaactgt gaagccaccc 240
tgggctacag aaaccacagt cttcccagca attattacaa ttcttgaatt cttggggat 300
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gtatTTaaaaaaaagaaaaactttctgaatgcctacctggcggtgtataacc 530

<210> 189
<211> 447
<212> DNA
<213> *Homo sapiens*

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caaatttgaa tcatttgtca tgtatgatta tttctgttaa atgtacacag tatttaagat 180
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ttgtttctttt gtttcttttt ttcaaattgt gtttagaaat actgtataaa atatgcagta 300
gtgatataaaa gaatttatatc caaggtataa taaaagccat tacgtatgaa ctcatccgtg 360
tctcattttg tggtttattt tgtgatctct tgtccactaa gtatctgtt aatgccagt 420
atctcagtct ttctgaagcc ctgaaat 447
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<210> 190
<211> 484
<212> DNA
<213> *Homo sapiens*

<400> 190 gatgcggccgg ttttgaaggc gacggggaga cagatcctca ctctccgtgt gaggctcga 60

22335_US_Sequence_Listing_060807.txt
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ccggtgacac gccccaccc gccccaaagc gggccgcccgg agcgtccact ccaagcctga 420
gcatccacac aattccagtg ggccctcggt gcctgctgtg aactgctttc cctcgaaatg 480
tttc 484

<210> 191
<211> 569
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (182)..(515)
<223> n = any nucleotide

<400> 191
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tgcccaatcc cagtaatgct gctgcctgac agaaacacac acacagccac agttgccaaa 180
tncccgtaact ccttgccacg gttctagagc agcgttagaca gctggtaaac tgaagagcac 240
aactataattc ttatgaagga atttgtacct ttggggtatt attttgtggc ccgtgaccct 300
cgttattgtt acagctgagt gtatgtttt gttctgtgga gaatgctatc tggcattatg 360
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tgcaaaactc aacgatcaga ttcacggac 569

<210> 192
<211> 543
<212> DNA
<213> Homo sapiens

<400> 192
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ttccaggcat tatggattat ctgactccag aaaaagaacg cgtacaggaa gatcttggcc 180
tgctgcaata ccacatttgc ggagaagaag aggtcgtctt ccaagaagag cactccagac 240

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tcagaactca gaaattgtaa aagatgatga aggcaaagaa gattatcagt ttgatgaact 300
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aactgcatcc tgactgttagg actgaacatt atgttcactg cactctgatt ttctgttaggt 540
aca 543

<210> 193
<211> 563
<212> DNA
<213> Homo sapiens

<400> 193
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agtataact accttagcat gaagatgctc atgcctaaga atgaaaatttgg 180
ctcccattca atcatgttagc aagaacttaa agaaattcac tactcagtt tttatttta 240
aaaaacagta attgagatata tgaagacatt acaatttagt ttgtgtggtc tttttttaaa 300
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attgctacta ccttaaatttgg aaa 563

<210> 194
<211> 435
<212> DNA
<213> Homo sapiens

<400> 194
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tgcttaggt taggt 435

22335_US_Sequence_Listing_060807.txt

<210> 195
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<212> DNA
<213> Homo sapiens

<400> 195
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gcaaggataa gcggacaggt ccagaagccc cccggAACGG cactgttcac ctttatctga 240
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aatgtaccgg tgccatctg 319

<210> 196
<211> 553
<212> DNA
<213> Homo sapiens

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<210> 197
<211> 525
<212> DNA
<213> Homo sapiens

<400> 197
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<212>	DNA					
<213>	Homo sapiens					
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22335_US_Sequence_Listing_060807.txt

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<210> 204
<211> 563
<212> DNA
<213> Homo sapiens

<400> 204

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aaactggaaa gaaaacctga	attacactac attttcgaag	tctcttgtaa ttatggaa	480
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cacattgtat ccttaattc	ttc		563

<210> 205
<211> 515
<212> DNA
<213> Homo sapiens

<400> 205

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gtatccctg gactaaattc	cccttgggaa agacgaaggg	atgctgcagt tccaaaagag	300
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22335_US_Sequence_Listing_060807.txt

caatatggtc ccaaattgact gactgcaccc tctgtgcctc agccgttctt gacatcaaga 420
atcttctgtt ccacatccac acagccaata caatttagtca aaccactgtt attaacagat 480
gtagcaacat gaaagacgct atgttacagg ttaca 515

<210> 206
<211> 541
<212> DNA
<213> Homo sapiens

<400> 206
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ctatctccgc tgtgactcca ctcagccctt cttggcgggc ctcaccccca gcccccaagtc 180
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ccaggaggac gactgtgtct ttgggccact gctcaacttc cccctcctgc aggggatccg 300
ggtccatggg atggaggcgc tggggagctt ctaggccttc ctggggttcc cttcttggc 360
ctgcctctta aaggccttagt ctagctggag aagaggggag ggtccataag cccatgacta 420
aaaactaccc cagcccaggc tctcaccatc tccagtcacc agcatctccc tctcctccca 480
atctccatag gctgggcctc ccaggcgatc tgcatacttt aaggaccaga tcatgctcca 540
t 541

<210> 207
<211> 437
<212> DNA
<213> Homo sapiens

<400> 207
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cgaatcgtcg tgctgacatt gagtcacggta tgaggaaggt acaagtcctt taagatcaaa 180
actcaaacgg gccgttctt ctaaggtgtc ggtatgtggg gagtggtaca aaatggtctg 240
atgctccttc aaaaacattc acttttaca acgtcaagga attaagcata aaaaagattg 300
gttaaaagct ttggtttcta gtaaaggta gtgtgtgtgg ttttttaag aagctgtttt 360
gctaaattat ttttacttgg aatgtttcaa acagattca ggctgcaaac ttgtttata 420
atcgtttgct tctccaa 437

<210> 208
<211> 542
<212> DNA
<213> Homo sapiens

22335_US_Sequence_Listing_060807.txt

<400> 208
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aaaagactgc tactatctac tatttaaga atgtaattga ttgttcggta tttcctatcg 180
acgtttattt acctctttag cacttatact ttagcataaaa aaatgttgag ttatcaccac 240
cttcaattc catggacctg attttccag aaagatgttt tcctcttca gattttgtta 300
caaggctaaa atgtcttcc catccataac caagtcctcc tatgggtaca taaacccaaa 360
gtccccactt cttaaaagg gatatgatca agttataaca tgtaccctgc ttcccccaac 420
cctgccttt tcactaaata agcatgttagc tcagtggttt ccaaatttgg ctgcacattc 480
ataccaatca ccaggggatt ttttaaaat cctgatgccc aacttgcact ccacattaat 540
ta 542

<210> 209
<211> 437
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (148)..(148)
<223> n = any nucleotide

<400> 209
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ccagctagat catgcactgt tgaccacntg agcaatctgt gttacactag agttcacagg 180
gcattttgag tgttagacgtg agtgcctaaa catatttggg tttctcttc aggttttaaa 240
tgtttcaaatt gtaatttttg ctcatcagtg cagttatcaa tgcaatttttta tattccttga 300
ggggagaaag aggggtctta ttgtacatgt ccaagggggg tgataagagt attatctgtt 360
taatttaatt ggaacaaacc attgtcttaa cgcagccatg gtttgaattt gttatcttgg 420
gctgaccggc gcatgta 437

<210> 210
<211> 486
<212> DNA
<213> Homo sapiens

<400> 210
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gatatttcag tgcagaaaaac cccacaaaaaa gccacaacag gtcgctcatc ccgtcagtca 120
tcctttattt cagtcggat cttgggtt gttctgttgg ccatttcgt cgcattattc 180

22335_US_Sequence_Listing_060807.txt

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ctaattgaatt	cctcaggagg	ccattctgag	ccacactgaa	aaggaaaatg	ggaatttata	360
acccagttag	ttcagcctt	aagatacctt	gatgaagacc	tggactattg	aatggagcag	420
aaattcacct	ctctcaactga	ctattacagt	tgcattttt	tggagttctt	cttctcctag	480
						486
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<211> 555						
<212> DNA						
<213> Homo sapiens						
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gaatgaggga	acatgtaatg	aatgagggtt	atactaacaa	agacagattt	gtgactctgg	180
aggagttttt	gaaagccaca	aaaaaaaag	aattcttgg	gccagatagc	tgggagacat	240
tagatcagca	acagttcttc	acagaggaag	aactaaaaga	atatgaaaat	attattgttt	300
tacaagaaaa	tgaacttaag	aagaaggcag	atgagcttca	gaaacaaaaa	gaagagctac	360
aacgtcagca	tgatcaactg	gaggctcaga	agcttggata	tcatcaggc	atacagcaga	420
tggacacaaa	aaaattacaa	caaggaattt	ctccatcagg	gccagcttgg	gaattgaagt	480
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catctatttc	atctt					555
<210> 212						
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<212> DNA						
<213> Homo sapiens						
<400> 212						
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catcaagaaa	tggataaatg	gggcctttagt	aaatcaggct	tgcaggctca	aagctgcaat	120
ctgcccactc	tcaggtactg	agactttgt	ggcctcagac	accaggaaga	aagttggat	180
acagtcattt	gagttaaaaa	gggaatgacc	cctcagaaac	ccacattagc	agtgttactc	240
ttggaactgc	ctttactttt	aacgctctct	gttctgaaaa	agaggtgtt	ggttacgtgt	300
gagccaacat	cacgtttgt	tagctgtat	ttaccttgt	ccgtttaaaa	gacttcacgg	360
agccattctg	tatacaaggt	gtgctcttc	caatgtagaa	ggggttatgg	aaaagggtgc	420
gatcccttgc	tgttaactgg	agagaccagt	cccaaacaga	gggaaatttt	aagcccttct	480
catcacccaa	ttggatgt					498

22335_US_Sequence_Listing_060807.txt

<210> 213
<211> 522
<212> DNA
<213> Homo sapiens

<400> 213
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aaccaaagca atatactctt acatgatttc taggccccat gaccaggatgt ctagagacat
taattctaac cagttgtttg cttttaatg agtgattca ttttggaaa caggttcaa 120
atgaatataat atacatgggt aaaattactc tgtgcttagtg tagtcttact agagaatgtt
tatggtccca cttgtatatg aaaatgtggt tagaatgtta attggataat gtatataaa 180
gaagttaaag tatgtaaagt ataacttcag ccacatttt agaacactgt ttaacattt
tgcaaaaacct tcttgtagga aaagagagct ctctacatga agatgacttg ttttatattt 240
cagattttat tttaaaagcc atgtctgtta aacaagaaaa aacacaaaaag aactccagat
tcctggttca tcattctgtt ttcttactca cttttcaag tt 300
522

<210> 214
<211> 501
<212> DNA
<213> Homo sapiens

<400> 214
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ttaaattacc aagtaattac tgggtcatt ttgttttatg acagacacac gtatctaaca 120
aacaacaaa cagtgacctt ctccatgggt caaggacttc cttacaattt ctccctgagtt
aactttgtg aaaataatac ctaaggttt ctggcttatt gaggaaattt cctaacaaac 180
aaacaacaaa acaaacagaa gagaagatca ttaaccactg tatactttgt gtatataata
ggtcagtgtt aagaaatatg atttgggttg gtgcattgca gtaacttaggg tttattctat 240
ataatgaata ttatagatc tgtaacattt gtttcaaaat gctgtttcat ttttataaaag
taccagtgtt tagctgcttt t 300
501

<210> 215
<211> 507
<212> DNA
<213> Homo sapiens

<400> 215
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gttctggaat gcaatgttaa agaaagggtg gaagtggaaag gatgaggata tcagtcagaa
ggatatgtat aatatcatta gaattcacaac tcagaataac gagcaggctt ggaaggagat 120
180

22335_US_Sequence_Listing_060807.txt

tttgaagtgg gaagcccttc atgctgcaga gtgtccttgt ggtccatcat tgatccggtt 240
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gttgcccttt gataggcacg attggatcat aaaccgttgc gggacagaag ttagatatgt 360
gattgattat tatgatggtg gtgaagtcaa caaggactac cagttcacca tcctggacgt 420
ccgtcctgcc ttagattcac tttcggcagt atgggacaga atgaaagtcg cttggtggcg 480
ttggacactcg taaagcactg tttcaga 507

<210> 216
<211> 460
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (57)..(404)
<223> n = any nucleotide

<400> 216
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aatgaatgag gatggcctga cgcctgagca gcgagtagac aagattttca gcaagatgga 180
tangaacaaa gatgaccaga ttacactggg tgaattcaga gaagctgcaa agagcgaccc 240
ttccattgta ttacttctcc agtgcgacat ccagaaatga gctgatgtca atgctatggg 300
ctncncccaa gtctcnatgt tccattcagt ctgcagctat tcacacacac acacacacac 360
acacacacac acacacacac acacacacnc aaatattgct tggnctacct ataaatggac 420
ttgcttcttg tggaaac actcgtgtgc atgagaatgt 460

<210> 217
<211> 453
<212> DNA
<213> Homo sapiens

<400> 217
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cccggtgcc gagcactgcc tccgggcctc ccctgagacc acactcagca gtggcttctt 180
cgttgctgta attgaacggg tcgaggtgcc aaggtgagtg agtggggcg tgcttggag 240
gcgcaggatg gcaccggcac atctaacatc tacacttctc tagctcagcc tcacaggcca 300
aagcatcagc accagaacgc acacccagcc cagccccaaa gagaagaag agacagcaa 360
gagccgcagc cggtgctgc acaccgcctt gcacatagca gaggctccgg gctgactcct 420

tcctggtggg aaaggaagat gcctgtcctc tcc

<210> 218
 <211> 513
 <212> DNA
 <213> Homo sapiens

<400> 218
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 cccagaccaa tgtgagcctg ccccaagcc ccctctcatt ggaagtggca aggggcttcc 120
 ctcctgggg cagctacact cgtccccaga ggcacattcg tgcacattct cacagacacc 180
 gtctcacacg ttggctttgg acaaccaggc cccaaacttgg tccctgccc agggacctcc 240
 agcctggtgc ccagtgctca ggccacctcc tggtccagtc accacctgca gcctcggcag 300
 ggcaggtaca ggggccacct cggatgggag cctgggtccc tgcctccgct ctgccccctgg 360
 gtggctggga ggagaggccc tctcgggggt gacctggcg tcagccgtgg aacccccc 420
 tcctccctgg agtctgcctg agtccctcga gccgcgagcc ttcgctgaag tgcccttgct 480
 ataaccccccct ctgcttctgg tgtgtgacga ggc 513

<210> 219
 <211> 498
 <212> DNA
 <213> Homo sapiens

<400> 219
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 cagcgtcccg ccacagctac tacctgacac ttagctcatg cagagagatg atggctgatg 120
 ttccttctcc cttgggacat gggctggca cctgtggct gtcgatagtg ccctctgagc 180
 agagggtcac ggtcatgtca gtttggggga attctctgtt gtgcctcaga gactcccccc 240
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 agtttctcta gctgcagtgg aagattctgt tttcctgtgg ggaaaatgct cacttgagat 360
 tttgcaggga cccgggtctg tctgggttct gatgacatag taagagaaaag gtctttttc 420
 aggttggctg gtgaaaggaa ttgcatgtga ctcacacaaa caggagctag cccaatcata 480
 cactgactcg cgtgggtg 498

<210> 220
 <211> 527
 <212> DNA
 <213> Homo sapiens

<400> 220
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 tgagtgggtg gtcagaaaat acccatgctg atgaaatgac ctatgcccaa agaacaata 120

22335_US_Sequence_Listing_060807.txt

cttaacgtgg gagtggAAC	acatgagcct gctcagctct	gcataagtaa ttcaagaaat	180
gggaggcttc acctaaaaaa	cagtgtgcaa atggcagcta	gaggTTTGA taggaagtat	240
gtttgttct tagtgtttac	aaatattaag tactcttgc	acaaaatata ctTTTAAACT	300
tcataacctt ttataaaaag	ttgttgcAGC	aaaataatAG cctcggttct	360
ggattgctat aaaaaatgtc	aataagattg tacaaggaaa	attagagaaa gtcacattta	420
gggtttatTT	tttacacttG	gccagtaaaa tagggtaat cctattAGAA	480
gaactttttt	taagtttcct	aaatctgtgt gtgtatttg	527

<210> 221

<211> 487

<212> DNA

<213> Homo sapiens

<400> 221

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gcgcaaaggc cgcgtggcc	cactcctcgC	ctgcatcatc ggtacccagt	120
ccggatggT	gatcggtttt	ggtggagaa cgagggtgt	180
ggccctggcc	cagatctcat	tgccccggat	240
gtctaagaac	aacatcttca	tgtccaaACT	300
acttcctgca	ttgaacctgg	ttcctggag ggaagcctcc	360
gcagcagtga	gggtatATC	tagaggccag gtaagggggt	420
gatgagccca	gccctgttct	gggtgcagct gagaAAatga	480
gtgctca			487

<210> 222

<211> 480

<212> DNA

<213> Homo sapiens

<400> 222

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ttgtaaatta	catctgtcat	ggttcttgg agggccact	180
ttattgagca	cctactacat	gtactaggcg tgagaagcat	240
gaaagagata	ccaagatGCC	atctgtgtcc tggtagcag	300
ggagggataa	gccagctgca	gctggctgt gtggttgact	360
ctcaggccat	ggctccctt	tttcttcctc accctgattt	420
ctcctgaaga	ggaactggc	ctgttgcctt ttctgtacca	480

22335_us_Sequence_Listing_060807.txt

<210> 223
<211> 332
<212> DNA
<213> Homo sapiens

<400> 223
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actcagatgc cccaaatgtt ccgttggaa gctcccagga cagcactttt tatacagagg 120
acaccgcctc ggccccacgt ccttagaggc cagagcacat ctgaaaactg caatcacagc 180
cgtccgctgg aaaaacgttt cgaagcacag tggccagcga gcgagcacgt ggctactccc 240
tgttgcatgt caaatccaca cagatgtcag cggcagctgc tcggcagccc agccctggc 300
ctgggtgggt tcatgtccaa tcttggcga tc 332

<210> 224
<211> 292
<212> DNA
<213> Homo sapiens

<400> 224
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acaccaccc gaaaatataca ttgatggaa tccagaaacg ttttggacca ccacaggaat 120
gtttcccaag gaattcatta tttgtttcca caaacatgta aggattgaaa ggcttgtaat 180
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tttgagcaat ggattgaaaa agattggta cacacagagg ggcagctca aa 292

<210> 225
<211> 530
<212> DNA
<213> Homo sapiens

<400> 225
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cagctgccc gcccgcctt cctgcccggcc gcccggacag cagactgccc gtaacgcgcg 180
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ggagcgcaaa gaagctacag cctggactta ccaccactaa actgcgagag aagctaaacg 360
tgtttatattt cccttaaattt atttttgtaa tggtagcttt ttctacatct tactcctgtt 420
gatgcagcta aggtacattt gtaaaaagaa aaaaaaccag actttcaga caaacccttt 480
gtattgtaga taagagggaaa agactgagca tgctcacttt tttatattaa 530

<210> 226
<211> 423

22335_US_Sequence_Listing_060807.txt

<212> DNA
<213> Homo sapiens

<400> 226
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taagccatag acactatagt ataccagtga atcttttatg cagcttgtta gaagtatcct 120
tttattttct aaaaggtgct gtggatatta tgtaaaggcg tggttgctta aacaattttc 180
catatttaga agtagatgca aaacaaatct gcctttatga caaaaaaaata ggataacatt 240
atttatttat tcccttttat caataaggta attgatacac aacaggtgac ttggtttttag 300
gcccaaaggt agcagcagca acattaataa tggaaataat tgaatagtta gttatgtatg 360
ttaatgccag tcaccagcag gctatttcaa ggtcagaagt aatgactcca tacatattat 420
tta 423

<210> 227
<211> 489
<212> DNA
<213> Homo sapiens

<400> 227
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gcaaagtttt tgtttgtcaa tagtacttgc aaaacttgc aatttagcaga tgacttttt 120
ccattgtttt ctccagagag aatgtgctat atttttgtat atacaataat atttgcaact 180
gtgaaaaaca agttgtgcca tactacatgg cacagacaca aaatattata ctaatatgtt 240
gtacattcgg aagaatgtga atcaatcagt atgtttttag attgtatttt gccttacaga 300
aagcctttat tgtaagactc tgattccct ttggacttca tgtatattgt acagttacag 360
taaaattcaa cctttatttt ctaattttt caacatattg ttttagtgtaa agaatattta 420
tttgaagttt tattattttta taaaaaagaa tattttttt aagaggcattc ttacaaattt 480
tgcccttt 489

<210> 228
<211> 501
<212> DNA
<213> Homo sapiens

<400> 228
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gccatggatt ctgagtttg tttaaaagt gaaagccaag ttgggtgtatg taaaggattt 180
ccatgttagct gtggtgctag ttattactgg ctacattata tgctaagtgt atttgtttc 240
cccaagtgtta caagccttct atcaaaagta tggctataaa ctcataattt caaggtgttag 300
ggtagtggaaa tgcaaagttt aggagagcac tttaccaagc tgggtgcctc caaactgaaa 360

22335_US_Sequence_Listing_060807.txt

ttgtttgtaa	cgatagtctt	ttacagggttt	tcctttaaag	atgtttgtgt	gcttttaatt	420
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tgcatgacta	tcatcttga	g				501
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tgcgagtgag	cgaggtgaag	cccacctatc	gcaactccat	caccgtgcc	tacaagggt	180
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<211> 428						
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<213> Homo sapiens						
<400> 230						
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acctctcc	ccctctcc	agtttgccg	actgctttc	atctgagtca	ccatTTactc	180
caagcatgta	ttccagactt	gtcactgact	ttccttctgg	agcaggtggc	tagaaaaaga	240
ggctgtggc	aggaaagaaa	ggctcctgtt	tctcatttgt	gaggccagcc	tctggcttt	300
ctgccgtgga	ttctccccc	gtcttctccc	ctcagcaatt	cctgcaaagg	gttaaaaatt	360
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<213> Homo sapiens						
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22335_US_Sequence_Listing_060807.txt

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<211> 495
<212> DNA
<213> Homo sapiens

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22335_US_Sequence_Listing_060807.txt

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<211> 532

<212> DNA

<213> Homo sapiens

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<211> 535

<212> DNA

<213> Homo sapiens

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22335_US_Sequence_Listing_060807.txt

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<212> DNA
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<211> 411
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<213> Homo sapiens

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